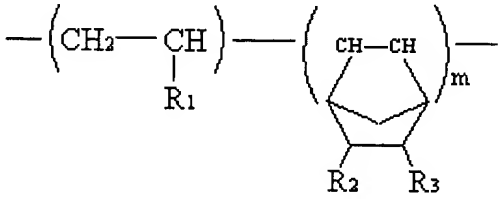
ABSTRACT

The present invention provides a light guide plate for liquid crystal displays. The light guide plate is made from a cyclic olefin copolymer (COC) material, which is represented by the formula:



wherein each of R_1, R_2 and R_3 is independently selected from the groups consisting of hydrogen and aliphatic saturated groups, and m is an integer which is equal to or greater than 1. The COC material is an amorphous and transparent copolymer, and is synthesized by alpha-olefin monomers and cycloolefin monomers in a catalyst of metallocene or a catalyst of π complex compound.